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AND BABINSKI'S CONCEPTION
OF HYSTERIA.

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THE TRAUMATIC NEUROSIS AND BABINSKI'S CONCEPTION OF HYSTERIA.*

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THE significance of the new doctrine of hysteria in the interpretation of the mysterious traumatic neurosis has not received the attention it deserves. An editorial communication pointing out its far-reaching implications received little attention in this country until the following letter reached me; and it is to meet the objections therein brought forward against the thesis that the considerations which follow are here presented:

"The ideas expressed in your article, 'Recent Advances Regarding Hysteria in Relation to Traumatic Neurosis,' and, in fact, the whole attitude of the Babinski school, are of a novel and even of a somewhat startling character. Although you do not specifically affirm it in your paper, the implied deductions from your conclusions seem to be a denial of the very existence of the traumatic neurosis, or a denial that any necessary connection of cause and effect exists between an injury not sufficient to produce structural alteration of the nervous system and the development of the hystro-neurasthenic syndrome, which has been styled the traumatic neurosis. If I understand your opinion correctly, it is

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that every case of traumatic neurosis arises from some suggestion either venal or ignorant upon the part of a medical attendant or other person coming in contact with the patient subsequent to the injury. There are two highly important aspects of this hypothesis to which I take the liberty of adverting. In the first place, does it change the practical aspect of the case to assume that suggestion must intervene after trauma to produce the neurosis, if the trauma must exist to establish the susceptibility to suggestion? A severe trauma, with all its attendant phenomena of horror, fear, and pain, is quite sufficient, I should suppose, to take the place of suggestion or afford the suggestion itself. It seems to me that even if the suggestion is always heterogeneous, the responsibility will not be shifted unless injury is always to be regarded as incapable of producing any effects whatever except those of a demonstrably histological or organic nature. Will those who are to mould the neurological thought of the future insist that this is the case?

"The second aspect of the question which appeals to me is its broad generality. It admits of no exceptions. The science of neurology, though it has accomplished wonders in unraveling the mystery of the nervous system, is in no position to acclaim so surprising a generalization. To be sure, there are many cases where suggestion, if it does not originate, at least accentuates the picture of the traumatic neurosis. But to say that, in every single case where the syndrome exists, it has originated in an externally imposed verbal suggestion is to totally deny and exclude the effect of shock as an element of suggestion. In your excellent paper you ascribe, as it seems to me correctly, the state of increased susceptibility upon which hysteria depends to the three great factors: faulty education, cerebral mod-

ifications, and hereditary constitution. But this does not necessarily deny to shock which may actually produce intense and characteristic functional disturbances a right to stand, directly or indirectly (and to my mind more likely directly), as a sufficient cause for the production of a state of psychic hypersusceptibility along with, or in conjunction with, the other factors mentioned by you. In other words, the traumatic neurosis develops upon the soil of traumatic hypersusceptibility, and consequent verbal suggestion is secondary and may not even exist. This brings me up to the final question as to whether or not trauma itself may act as the principal if not the unique element of suggestion in the development of a neurosis. This, it seems to me, can only be decided by the immediate isolation of the injured. If the traumatic neurosis fails under these circumstances to develop, then the position of the modern French school headed by Babinski will be more difficult to controvert."

In the first place, the fact that they are novel and even startling is no just cause to reject ideas. Secondly, the suggestions of which I spoke need by no means reach the patient subsequent to the trauma; nor does it need a trauma to establish susceptibility to suggestion; nor do horror, fear, and pain always accompany injury, and when they do so they need not necessarily afford any suggestion, and certainly cannot replace one. Of course, injury may produce emotion; but this is evanescent, unless perpetuated ideationally; for even shock does not suggest, but merely fortifies a suggestion if given; and this, as will appear, need not be "externally imposed verbal suggestion." The word "shock" is used by this writer in the psychological sense; and the psychic hypersusceptibility it connotes is a very minor matter compared with the "other factors." The sug-

gestion must exist, is usually primitive and not secondary, and need be neither "subsequent" nor "verbal." Isolation from suggestion, including antecedent influences, does prevent traumatic neurosis.

To show the connection of cause and effect between the hysteroneurasthenic syndrome and an injury not sufficient to produce structural injury to the nervous system, the best plan is to quote and comment upon such cases as the following:

Some time ago (1899) there was a railway accident in this country¹ in which out of 265 passengers 123 were wounded. Out of this number only two sustained severe injury to the nervous system and neither of these subjects suffered from traumatic neurosis. Twenty-four persons complained of injury to the spinal cord, and their statements were affirmed by medical witnesses. Putting aside the simulators, of which there were several, the others were treated by medical men who believed their patients to be suffering from some serious but obscure injury and who did not hesitate to affirm to their patients and their friends that the malady was of a dangerous nature.

The following particular case is a good example: It is that of a man who had not been externally injured, and who undertook a journey of 200 miles immediately after the accident. The next day on arriving at his house he became stiff and complained of pains. His wife called in the doctor, who informed the patient that he was suffering from Ehrichsen's disease and that he must remain in bed for five or six weeks. He went to bed and took enormous doses of bromide and chloral; applications were also made to the spinal column. The patient had been in business but had failed. The drugs and the confined life produced a loss of weight and

strength, and his general health became impaired. Three months later Dr. Bevan saw him. He pretended to have lost his reason and that the lower limbs were paralyzed. But Dr. Bevan took him out of bed, and persuaded him, with his help, to walk round the room. He recommended him to get up and take exercise, assuring him at the same time that he was not injured, and that he could be cured, if he wished it, in a month. He replied: "My doctor told me I would always be an invalid and you tell me that I am not ill at all; who must I believe?" Six months after the accident the suit was brought against the railway company. The proceedings were hastened, the death of the patient being feared. The patient claimed damages on the ground of permanent injury to the spinal cord. The proofs were made before the judge by the dynamometer, the esthesiometer, electricity, etc. He was given a large sum of money as compensation. A short time after he took up his work again.

Another case is that of a man who had no external injury, but who was greatly frightened, a typical case of traumatic hysteria. He, too, called in Dr. Bevan. He complained of a severe pain in the back and claimed that the lower limbs were paralyzed. At the end of a week the doctor took him in his arms and made him stand up, assuring him at the same time that he was not injured, only frightened. He cried like a child. In ten minutes he was persuaded that he could walk. He left the hospital three weeks after the accident. Shortly after leaving he consulted a neurologist, who told him he was suffering from a "commotion" of the spinal cord. Dr. Bevan then sent him to another medical man to whom he had already written his opinion of the case. This doctor thereupon advised the patient to commence work again, and he did so. After he

was cured he was very grateful for the treatment, although at the time it appeared very severe. As he admitted, he was so thoroughly frightened that if he had been told he was suffering from an injury of the spinal cord he is certain he would have become a chronic invalid.

Each of these cases shows that mere exhortation and compulsion quickly removed an inability to walk, supposedly due to some organic perturbation. Now, we have no evidence to show that either pathological exudates or abnormal arrangement of cell processes or static changes in the equilibrium of the Betz cells in the psychomotor projection area can be affected by exhortation; while we have strong evidence to show that exhortation and compulsion can induce or remove false fixed ideas as to motor and intellectual incapacity. But not only that, they can influence the emotions, which in turn, in course of time, profoundly modify nutrition; for the experiments of Pawlow² have shown how important is the psychic factor where the salivary and gastric secretions are concerned. Anxiety, worry, grief, are all forms of fear which inhibit these secretions. But not only are noxious substances produced in the stomach through the fermentation permitted by the delayed digestion there, but the retardation in the outflow of acid chyme interferes with the harmonic activities which are required for the outpouring of pancreatic and biliary fluids, as shown by Bayliss,³ The effects of this malnutrition and intoxication are seen in the yellow tint, emaciation, indicanuria, and other neurasthenic symptoms which the traumatic-hysterical eventually develops.

The so-called gastric neuroses are striking examples of this fact. They are cured by the removal of the patient's idea that his food will disagree; for it is only when this is done that he will normally di-

gest it; for when each morsel reinforces the dread and its inhibitory effect upon the gastric secretion, the food really does disagree, until from the vicious circle established, emaciation may become so profound that death may follow.

In the hit-or-miss therapy of unreasoning negation of all physical agencies employed by the Christian Scientists, these are among the patients who are cured. But though the cause of this disease is psychic, it is not necessary that it be cured by the substitution of one delusion by another. For confinement to bed, and the observation for a few weeks of his gain in weight, from which he cannot but infer that he must be digesting his food, when added to the true explanation of his condition gradually inculcated by his physician, is not only a more certain and permanent method of cure, but obviates the intellectual disorientation and disharmony with the universe connoted by a superstition. That the gastric neuroses are generally induced, or at least perpetuated, by the unskilled suggestions by medical men is clearly shown by Déjérine,⁴ and Bernheim.⁵ The unwary remarks doctors use before patients who consult them for indigestion, and their ignoring of the mental factor in dyspepsia, and of the laws of suggestibility, must be blamed for this.⁶ The analogy with the traumatic neuroses is complete: both are hysterical symptoms in the sense of Babinski⁷; for both are "induced by suggestion and removed by suggestion-persuasion."

Trauma is quite unnecessary, as shown by such a case as that Dubois⁸ reports, where a peasant boy, in the hospital for a trivial ailment, was told before the class that he would be unable to lift his right arm; and he could not do so until Dubois declared that a certain maneuver would give him the power; the boy then quickly raised his arm. Bernheim's

writings swarm with such cases, in which paralysis, anesthesia, or other incapacity is merely the expectation, the fervent belief, of the patient in his own incapacity. An exactly similar fervent belief is present in the popular mind that certain traumata produce certain disabilities, which accordingly manifest themselves in hysterical individuals.*

The source of the belief in Dubois' boy was easy to see, because experimental; while the source of the popular belief is buried in the traditions of "Ehriksen's disease," when it was believed to be due to spinal commotion. We now know that both spinal and cerebral commotion produce a clinical syndrome quite different from the traumatic neurosis. Concussion causes immediate symptoms, which may gradually pass off. In traumatic neuroses the symptoms rarely occur for some hours, days, or even weeks, and do not occur in all people; they require the predisposing cause, which in this case is the really efficient one. It is constituted by the suggestions of others, either already present in the patient's mind more or less consciously, or presented to him at the time of or after the accident by the injudicious solicitations of relatives, friends, or very often by the doctor who still believes in the anachronism of spinal commotion or traumatic neurosis.

The springing into consciousness of a latent suggestion by a shock is illustrated by the following case: A girl was brought to Babinski having become monoplegic upon receiving an electric shock while crossing a tramway line.⁹ This seemed like paralysis not caused by suggestion; but after the symptom had been removed by persuasion, further inquiry elicited the fact that the patient had overheard some months previously a conversation between some electricians who were speaking of the dangers arising from electric shocks of the above de-

scription. It is evident that upon experiencing the shock, there had flashed into the patient's mind a datum learnt from the conversation she had overheard and apparently forgotten; and that this memory furnished the suggestion at the base of the palsy she developed.

It is, however, not the shock itself which must be implicated here, but the ideational complex which it served to arouse. Complexes are the components of our mental life.¹⁰ Any of the numerous branches may recall by association the whole complex, and thus the complex may then dominate the consciousness to the complete exclusion of all other ideas. The fixed idea is too common to need illustration. Now, the emotional mood is more or less *en rapport* with a person's intellectual content. Hence an idea connoting sadness is accompanied not only with the feeling of sadness, but with the physical reactions of that state, too. Normally any idea-emotion complex occupies the field of consciousness only until displaced by some other, as required by the exigencies of social adjustment. But when accompanied by powerful feeling-tone, a complex may remain or recur until that feeling-tone is satisfied dynamically, or replaced by another. A pecuniary solatium may furnish the dynamic satisfaction of the feeling-tone of injuries in traumatic neuroses.

This, however, is not the only means of doing so; for even the indemnity acts only in virtue of its effect upon the patient's *amour propre*, which may be flattered in many other ways, as by sympathy, understanding, etc., as is illustrated by the following case: A railroad brakeman was thrown by the giving way of a stirrup while his train was traveling about ten miles an hour. He fell on the small of his back against a bank of earth, rolled over two

or three times, and lost consciousness for over half an hour. After crawling about half a mile he was found. He felt sick all over, and brought up blood, which also came from the bladder and bowels, only that day, however. After reaching his home town, he was assisted to his house, one and a quarter miles away. He did not sleep that night, but rested the next morning. In the afternoon he became restless, and sticking pains occurred in the back, and lasted several days. He was up and about with a crutch in fourteen days, but shortly afterwards he lost the use of his legs, having to move them with his hands, but he walked about on crutches, though he felt faint after progressing two or three squares. On account of anxiety and want of means he soon after went to live with his mother, his wife going to her father. When questioned, he replied, "Well, yes, I missed her"; but he stated that he was too much preoccupied with his health to care much. About three months later he was able to hobble with a stick only, but varied from day to day in his power to do so.

He said he felt a buzzing and a severe pain in the head as well as in the back; these did not begin until one month after the injury. He worried much over his position and circumstances, and the dependence of his wife, and in being unable to help her and his mother, who was an invalid with a younger boy to take care of. (He wept while relating this). He he never worried before his accident, but now he could not help it; for though he was owed \$225 by an accident insurance company, they would not pay him anything. He did not know what to think about his health; for though the railroad doctor upon seeing him after the accident declared that he would soon recover and be able to work, he had lost over twenty pounds in weight, had become very

weak, had sore throat and capricious appetite and sallow skin, and wept nearly every day. Moreover, about ten days after the injury, two other doctors, called in by his family, each said independently of the other that he had a congestion of the spine, which, though probably temporary, might last a lifetime. He had a very severe "fainting spell" one day after a cold; but when interrogated, he confessed to having eaten a large meal of sweet milk and cold slaw, and this was the only occasion since the accident upon which he had actually vomited, though he had often had a dull, sick feeling when overheated. He wished he had never seen a railroad, "meaning nothing detrimental to anyone but myself."

He had employed attorneys who were bringing a claim against the company; he had asked for two thousand five hundred dollars and employment, and had received much sympathy from his friends. When asked his object in this, he replied: "I will be frank with you and all. I was looking forward to promotion. It was no fault of mine that I was injured; if it had been, I would have said nothing. I merely ask for a sum of money and a job I could do. I could get around and do a job I could do, but I would never run railroad again; for in catching a box local, it means heavy weights all day, and I cannot gain promotion except through this." He thought he might do office work, though he dreaded it; for outdoor work suited him better than the confinement of bookkeeping; besides, a good brakeman could make a hundred dollars a month.

Upon examination, I found the tendon reflexes equal on the two sides and neither exaggerated nor unduly feeble. The cutaneous reflexes were all unusually active with the exception of the plantar, in which, however, the toes distinctly flexed upon

several occasions, until inhibited volitionally. When I distracted his attention, flexation again occurred. Sensibility: A pin prick on the lower limbs is called a punch; cold steel is called warm, and the diapason is felt only when in full vibration. Cotton wool is unfelt in front as high as the groin, and behind as high as the iliac crest on the right side, at first; but after the left side had been examined and found insensitive only as far as the gluteal fold, he confessed to feeling the wool on the right buttock also. When asked to say when he did not feel the wool, he said "no" the first seven times he was touched on various parts of the lower limb, later ceasing to reply. The gluteal esthetic boundary varied by about two inches at different examinations. In the lumbar region, he was bilaterally hyperesthetic in a two-inch zone, shading off below and sometimes extending onto the buttocks. Posteriorly, the upper border of the zone corresponded to D, 12 and L, 1; laterally to D, 10-11, and anteriorly to D, 8-9.

The motor power was good. When he attempted to use the legs alone, he strongly tightened up the antagonistic muscles; but when his attention was diverted he could maintain powerful extension at the knee, even on the left side, though he declared himself weak there from an old dog-bite. Babin-ski's combined flexion, and Hoover's and Zenner's tests were all negative. The pupils are equally dilated, and respond promptly and vigorously to light and accommodation, but no pain reflex could be elicited. There was no loss of memory or other intellectual defect, although the affectivity was perturbed as described.

It should be evident that the incapacity of this man arose from the fixed idea, very probably inculcated after the accident by his friends, although contributed to largely by the common belief of rail-

road employees, that an accident can induce serious nervous disease. The doubtful prognosis of the doctors, evidently unskilled in neurological diagnosis, strongly fortified the man's belief and consequent anxiety. The anesthesia, produced by previous medical examination, might have deceived an inexperienced observer; but the wool test, which had not previously been employed as I performed it," quickly revealed not only an "uneducated" line of demarcation, but demonstrated that the man did feel by the very fact that he said he did not. Of course, even had I not succeeded in thus demonstrating the incongruity of the syndrome with the neuropathology of the spinal cord, the complete conservation of all the reflexes was sufficient to show that the anesthesia did not arise from disease of the spinal cord.

The diagnosis, then, was hysteria, the psychic elements of which were clearly revealed in the foregoing history. The prognosis given was favorable; but I first explained to the patient and doctor separately the real genesis of the disorder, showing the former the effects of worry and anxiety upon bodily nutrition and the rôle of ideas over bodily activity.

The treatment I recommended was the reestablishment of good nutrition, regular exercise, a removal of grief and worry by the assurance of a reasonable compensation for the anxiety and loss he had suffered (for though his ideas were erroneous, and he was in one sense of the word a simulator, he was so unconsciously, and because of the environmental beliefs he had acquired), and the declaration that by following my treatment he would be capable of moderate work in a few weeks, and in a short time would be entirely restored to health. Being asked for a certificate, I gave the following to both patient and doctor: "This is to certify that I find

Mr. V. to be suffering from a condition of incapacity for free walking or mental or physical work from the effects of a fall from a brake car (as I am informed.) This state is induced, as a result of the aforesaid accident, by the worry, anxiety, and loss of means directly caused thereby. I believe that by appropriate treatment he could be restored to a certain extent within one month; and that within three months he could be fully capable of pursuing any laborious avocation he chose. He is, however, at present in too low a state to be capable of long, continuous labor, even though the incapacity of his limbs were immediately removed. There is, and has been, no disease of the spinal cord or peripheral nerves at play in the induction of any of the symptoms which I find. The erroneous belief that there has been such an injury powerfully contributes to the anxiety which maintains his present state."

As to the outcome, a letter from the doctor a few days ago stated in reply to my query: "We compensated V. by a sum of six hundred dollars; and he went back to work *on time* just as you predicted." *Naturam morborum curationes ostendunt.*

It is true that during shock or other emotion, intellectual control may decrease, and suggestibility be favored. Thus, Sir Arthur Mitchell¹² has demonstrated that during blushing and laughing as well as in dreams the conative element of our psychic life is in abeyance, and one is practically insane for the moment, self-control being gone. A parallel case is that of fright; but this still quickly passes away unless maintained artificially ideationally from a suggestion, not necessarily made after the event, but perhaps latent, as in the case previously reported. The suggestion need not even be explicit; but often is implicit in the whole conduct of those

who surround us, and may be made by manifestly insincere attempts to minimize what it is easy to see is believed to be a grave danger. Every animal trainer knows how contagious is alarm; and similarly among primitive intelligences, suggestions of fear are quickly seized. Guy de Maupassant and Zola have vividly depicted the genesis of fear by this mechanism. But, as I insist, these states quickly pass unless they have some powerful ideational basis for their maintenance.

The evidence adduced to prove that a so-called visceral or vasomotor neurosis due to a physiological path¹² acquired in the spinal and lower neuroses is very meager. (The word *neurosis* is used by these writers in a very different sense from that given by Souques,¹⁴ when he describes what really is a neurosis; Sherrington¹⁵ justly employs the term *psychosis* to signify telencephalic reactions.) The disposition toward precurrent and consummatory reflexes organized phylogenically as instincts inheres in the neuronically arranged very differently to the labile differentiability of psychic adaptation in the neopallium. It is to the latter that we must look in explaining the reactions of these patients; and that these are mental, not neuronically, is shown by their ready modifiability by mental means.

It is thus again to "idea" that we must resort in order to explain the perpetuation of even the motivity of this psychoneurosis. Moreover, it is a question of a notion dominating because it is unmodified by other, correcting or inhibitory ideas, *i.e.* it is a suggestion.¹⁶ Hence, of traumatic neuroses suggestion is the sufficient cause, and none of the others alleged is even essential. The traumatic neurosis is therefore pure, unadulterated hysteria, for its primary symptoms are each "susceptible of

production by suggestion and of disappearance by means of suggestion-persuasion."⁷

As to the diagnosis of susceptibility, it may be affirmed, and not merely guessed; for the method of exclusion need no longer be relied upon when differentiating psychic disorders.¹⁷ The signs by which we distinguish psychic symptoms are as positive, clear, and demonstrable as any other reaction observed at the bedside.¹⁸ For instance, a blush induced by a suggestion by the investigator is as much an observable, unmistakable, pathognomonic reaction as is the more simple extensor reaction of the great toe when the sole of the foot is lightly stroked in a patient having a disorder of the motor projection fibers in the pyramidal tract or elsewhere in their course.

The tests we employ for the estimation of attention, perception, memory, association of ideas, fatiguability,¹⁹ differ not in kind, but only in complexity from those employed in the mensuration of motility and sensibility, including the function of the special senses, the validity of which is disputed by no one. Even the emotions are now being studied by the exceedingly delicate galvanometric method of Féré,²⁰ resuscitated by Tarchanoff,²¹ Veraguth,²² and employed by Jung,²³ Petersen,²⁴ Sidis,²⁵ etc.

We are not in a position to measure the very complex reaction known as suggestibility; but it would be as absurd on this ground to forbid us to ascertain it clinically as would be the prohibition of cardiac murmurs as physical signs unless we measured their sonority instrumentally. Just as skill in an appreciation of cardiac murmurs requires a long apprenticeship in auscultation, much more does the technique for the elicitation of suggestibility require training and experience.

The outstanding corollary of these doctrines is

the tremendous power of the medical attendant to impose, or not, upon his patient an idea which may create such a derivative of the imagination as a syphilophobia, astasia-abasia, a paralysis or weakness of an extremity, or any of the numerous imaginary diseases suggested by medical men by injudicious questioning or advice.⁶ I need not here discuss the deliberate venality which arouses fear for its own profit; for that fear is often allayed by the ingenuity by which it has been incited. I speak only of the blunderer in whose mind the idea of organic disease permeates his conduct so as to alarm the patient. Nor need I do more than allude to a factor which has led to much confusion, viz., simulation; for it has been most luminously analyzed with rare psychological insight by Dupre.²⁶

A false and exaggerated optimism is in this respect as fertile in unfortunate suggestions as is the preceding method; for the patient quickly perceives the insincerity of his attendant's remarks. Both attitudes arise from the want of precision in methods, and consequent uncertainty of diagnosis.

To the doctor's temporizing thus engendered we must attribute the birth of evolution of the so-called traumatic neurosis. Now, pathology has taught us that spinal and cerebral commotion cannot give rise to symptoms of the character and duration complained of by the victims of railway spine, and that hematomyelia and concussion are both very different clinical pictures. Chemistry has taught us that no constant change occurs in the secretions of these patients. From biology we learn that other organisms suffer from just such disabilities independent of trauma; and from ethnology that other races and peoples show a similar syndrome, though the thought of a railway train has never entered their heads. Psychology has taught us that such

symptoms can arise purely from an idea, and can be removed by another idea.

We cannot then attribute this disease to trauma as such, but must do so to the expectation of medical men of the last generation that such a condition was biologically present, and to the consequent present belief in its existence by the laity, who are always laggards in science.

This popular belief is prevented from dying by the few medical men who still foster the doctrine that trauma can itself produce the neurosis in question. Whether it is done through respect for authority, by following the fashion, on account of want of information, or by reason of venality, the effect on the public mind is alike; and it is high time that we, as a profession, orientated ourselves as regards hysteria in a fashion at once precise and comprehensible, so that an end may be put to the scandal of permitting a premium to be placed through our fault upon want of hardiness, lack of self-respect, forgetfulness of obligations, even when simulation, unconscious or deliberate, is not in question.

To do this the first essential is a thorough knowledge of the organic nervous diseases, revealed by our studies in clinical neurology, and the second requisite is due, not exaggerated, appreciation of the rôle of the psyche in the production of symptoms apparently somatic.

When psychological mystification is replaced by diagnostic positiveness, such results as were shown by my own and Bevan's cases are more likely to be the rule than the exception, as at present. Only in this way will disappear the reproaches suffered by our profession for incompetence in the face of certain long-standing nervous affections of which the functional nature is later proved by a cure through

Christian Science, Mental Healing, and other faith cures. Sometimes, the psychic element in the recovery is not so clear; for example, when it is disguised in such procedures as cheiropraxy, osteopathy, homeopathy, or even in some cases electrotherapy when indiscriminately applied. Any of these means, just as surely as drugs, may affect a symptomatic cure merely through the suggestion they convey. In this respect it is to be regretted that the procedure of too many practitioners is defective; for many, when uncertain or vague in their diagnosis, will run the gamut of their armamentarium on the chance of a lucky hit. Even the therapeutic blunderbuss is by no means extinct.²⁷

It is to be feared that even the careful studies of the adherents of the psychoanalytic method need revision regarding the suggestions unconsciously made by the observers.²⁸ Until this is done this field, promising though it may appear, must be entered with due scepticism.

REFERENCES.

1. Bevan: *Jour. Amer. Med. Assn.*, 1900, XXXV, p. 728.
2. Pawlow: The Huxley Lectures, *Brit. Med. Jour.*, 1906, Vol. LIII.
3. Bayliss: *Brit. Jour. of Physiology*, 1903, XXIX, 174-180.
4. Déjérine: Les Fausses Gastropathes, *La Presse Méd.*, 1906.
5. Bernheim: Suggestion, Hypnotisme et Psychotherapie, Paris, 1908.
6. Williams: Le Rôle du Médecin en créant ou en Maintenant par ses Suggestions maladroites les Maladies produites par l'Imagination. Congrès des Neurologistes en Lille., 1906; *Trans. Amer. Med.*, Aug., 1908.
7. Babinski: Ma Conception de l'Hysterie, Paris, 1906.
8. Dubois: Le Traitement Moral des Psychonéuroses, Paris, 1903.
9. Williams: The Nature of Hysteria, *International Clinics*, 1908, Vol. III.

10. Jung. Ueber die Phychologie der Dementia Precox, Halle a S., 1907.
11. Williams: Modifications of the Sensibility in the Diagnosis of Disease, *Amer. Jour. Med. Sciences*, 1909, April.
12. Dreams, Blushing, and Laughter, London, 1906.
13. Prince: The Unconscious, *Journal of Abnormal Psychology*, December, 1908.
14. Néurose Secréttoire, *Rev. Neur.*, 1908; Jan. 1, p. 1.
15. The Integrative Action of the Nervous System, London and New York, 1906.
16. Williams: The Difference between Suggestion and Persuasion, *Alienist and Neurologist*, 1906, May.
17. Id., Psychometry in the Diagnosis of Cerebral Disorders, International Clinics, Spring, 1909.
18. Id., The Differ. Diag. between Neurasthenia and some Affections of the Nervous System, for which It Is Often Mistaken, *Archives of Diagnosis*, Jan., 1909.
19. Vaschide: L'Examen de l'Intelligence, Bucharest, 1904.
20. Soc. de Biol. de Paris, 1889.
21. Pflüger: Arch. für Physiologie, 1890.
22. *Arch. de Psychiatrie*, 1906.
23. Jung: "Exp. Beobacht über das Erinnerungsvermögen," *Centralb. für Nervenkeilk u. Psych.*, 1905.
24. Brain, 1907, XXX, July.
25. Physiological Review, 1908, 1909.
26. Dupré: Le Mythomanie, Paris, 1906.
27. Breuer und S. Freud: Studien über Hysteria, Leipsig, 1895.
28. Scott: A Criticism of the Psychoanalytic Method, *Jour. Abn. Psy.*, Boston, 1909.